5-day-old stages of nestling life. During cool windy weather, length of attendance-periods increased.

The young left the nest at the age of 6 or 7 days, with the juvenal-feather tubes just beginning to open.

## LITERATURE CITED

BARROWS, WALTER BRADFORD

1912 Michigan Bird Life. Michigan Agricultural College, Lansing.

BENT, ARTHUR CLEVELAND

1940 Life histories of North American cuckoos, goatsuckers, hummingbirds and their allies. U. S. Nat. Mus. Bull. 176.

BURNS, FRANK L.

1915 Comparative periods of deposition and incubation of some North American birds. Wilson Bull., 27: 275-286.

CHAPMAN, FRANK M.

1937 Handbook of Birds of Eastern North America. D. Appleton-Century Co., New York.

HERRICK, FRANCIS HOBART

1910 Life and behavior of the cuckoo. Jour. Exper. Zool., 9: 169-233, pls. 1-7.

1935 Wild Birds at Home. D. Appleton-Century Co., New York.

LACK, DAVID

1940 Courtship feeding in birds. Auk, 57: 169-178.

ROBERTS. THOMAS S.

1932 Birds of Minnesota, vol. 1. University of Minnesota Press, Minneapolis.

1030 25 AVENUE COURT, MOLINE, ILLINOIS

GENERAL ZOOLOGY. By Tracy I. Storer. McGraw-Hill Book Co., N.Y. 1943: 6 x 9

in., xii + 798 pp., illus. \$3.75.

Ornithologists who want to gain a better understanding of birds in relation to the rest of the animal world will do well to study this admirable new zoology text by the California ornithologist, Tracy Storer. His 37 page chapter on birds is a remarkably clear and concise summary of the whole field of ornithology. Other chapters especially helpful to students of birds are those on ecology, distribution, and organic evolution.

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